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# Incentives and Social Norms in Household Behavior

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In a broad psychological perspective, both economic incentives and social norms may be be regarded as giving rise to purposesful, or "rational" behavior. By this I simply mean that individuals act in accordance with expected reward or punishment, even though the *form* these take differs substantially in the two cases. Whereas economic incentives imply "material rewards", or favors that can be traded for such rewards including leisure, social norms imply "social rewards". The latter basically take the form of approval or disapproval from others, and related feelings of pride or shame. Moreover, once a social norm has been internalized in an individual's own value system, behavior in accordance with, or against, the norm will also result in feelings of self-respect or guilt.[2] All this suggests that not only economic incentives but also social norms may be analyzed by means of utility theory, as will be illustrated below.

Many social norms may not have much to do with economic incentives (Elster, 1989). In some cases, it is, however, useful to study the interaction between them. Indeed, this is the basic message of the paper. My discussion will be limited to three norms of apparent importance for household behavior: (i) work norms; (ii) norms against wage underbidding; and (iii) saving and consumption norms. Thus, the paper deals with norms concerning willingness to work, ability to get a job and the use of income.

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[2] Both (dis)approval from others and individual feelings of selfrespect or guilt distinguish social norms from habits and conventions; the latter may be interpreted as "focal points".

*I Work norms*

Before the advent of the modern welfare state, adults (without sufficient capital income) could not survive without working unless they were supported by altruistic relatives and friends, though general charity, the church and public poor relief sometimes intervened as "supporters of last resort". It was natural that a social norm in favor of work emerged under such circumstances. One mechanism was presumably an evolutionary process in which individuals "rationally" imitated the economic behavior of others, namely those who succeeded in supporting themselves by their own work. It must also have been in the interest of relatives and friends, particularly parents, to promote good working habits in the younger generation so as to prevent free-riding on the altruism of others in the future. One method of achieving this may have been explicit, or perhaps more often implicit threats to withhold economic support later on, i.e., the exercise of "domination".

This attempted explanation is consistent with the view often expressed in sociology and psychology that social norms emerge as a result of spontaneous interaction between individuals in small groups via a process of socialization. Group dynamics and group leadership are part of the process by which norm senders, including parents, may then influence the norm receivers, including youngsters. As emphasized by perceptual theories in gestalt psychology, "framing" is another psychological mechanism by which individuals learn to accept a norm as a natural way of interpreting and evaluating their situation; the use of language is an example of such framing, as when a high preference for leisure is denoted "laziness".

While economic incentives and social norms against living off handouts from others were highly compatible before the buildup of the modern welfare state, the situation is rather different today. In countries with generous welfare-state arrangements it is, of course, much easier than before to support oneself without working. But it is likely that social norms inherited from the past constrain the negative effects on work of both various welfare-state arrangements and the taxes required to finance these arrangements. Moral hazard and cheating with benefits or taxes are probably also held back by another important social norm inherited from the past, namely honesty. While social norms like these are likely adjust to changes in economic incentives, this probably occurs only with time lags.

As a result, tension easily arises nowadays between economic incentives and an inherited social norm in favor of work. This tension is worth modelling. As the social norm is assumed to have been inherited from the past, when the incentive structure was different, the *existence* of the norm is taken as exogenous in this formalization. By contrast, the intensity with which it is perceived by the individual is endogenous in the model. The influence of the social norm may, in fact, be modelled in the same way as interdependent preferences, in particular when *aggregate* behavior (of society as a whole or a reference group of individuals) is assumed to enter the individual's utility function. Following Lindbeck, Sten Nyberg and Jörgen Weibull (1996), let us assume (tautologically) that each individual chooses to work if and only if this results in higher utility than living off the transfer that is available when he chooses not to work, i.e., iff

$$u\left[(1-t)w_i\right] > u(T) + \mu - v(x). \qquad (1)$$

$u(\cdot)$ is the utility from income and $v(\cdot)$ the disutility from deviation from the social norm. $t$ is the tax rate, $w_i$ the wage rate of individual $i$, $T$ a lump-sum transfer available to individuals who do not work, $\mu$ the *difference* between the utility derived from leisure and the intrinsic utility of work (including social interaction with colleagues at work), and $x$ the share of transfer recipients. The individual takes $t$, $T$ and $x$ as given when making economic decisions. The $u$-function is increasing and the $v$-function decreasing in their respective arguments. The latter assumption expresses the idea that a social norm is felt more strongly, the greater the number of individuals who obey it. Thus, the adherence to a social norm is a choice conditioned on other individuals' adherence to the same norm. [3] The psychological explanation for this type of behavior may be either that disapproval from others is more troubling if expressed by many people than by few, or that other peoples' behavior is assumed to signal information about what is proper or potentially successful behavior. Imitative behavior of this type has been baptized "the principle of social proof" in social psychology (Robert B. Cialdini, 1984). It is for these reasons natural that behavior based on social norms has recently been described in terms of game-theoretic equilibria, in which each

[3] Other models in which the individual suffers a utility loss from deviating from a social norm include George Akerlof (1980) and Douglas Bernheim (1994). Formally, similar approaches are found in "critical-mass" models such as Thomas Shelling's (1971) tipping model and Mark Granovetter's (1978) rioting model, though the interdependencies between individuals in these models do not have the character of social norms.

individual's adherence to, or violation of, a social norm is a best reply to the expected behavior of others.

Suppose that individuals differ only with respect to their wage rates, and that these are distributed according to a cumulative probability distribution function. Let us also assume conventional mathematical properties of various functions, such as continuity. It can then be shown that for a given policy, expressed as a tax/transfer pair *(t, T),* a unique critical wage rate *w*(t, T, x)* is a solution to (1), when expressed as an equality. All individuals with higher wages choose to work and those in the population with lower wages, the fraction *x,* choose not to work. With a balanced budget, there is then a unique equilibrium population share *x* of transfer recipients. An equilibrium position in this framework implies that if all individuals expect a population share *x* to live on transfers, then and only then will they in aggregate make such individual choices that this population share will also be realized.

Let us now assume that a political process, in the form of voting on tax rates (and transfers), is added to the model. A joint politico-economic equilibrium can then be rigorously determined and analyzed, assuming that everyone can predict the consequences of changes in *t* and *T* for the number of beneficiaries. Political equilibrium is then defined as an unbeatable policy (a Condorcet winner) in the sense that no other balanced-budget policy is preferred by a majority of voters. In fact, it turns out that there are only two alternative political equilibria if all individuals are able to choose between living either on work or on benefits, and if voters have no altruistic feelings towards others. In one equilibrium, taxes and benefits are zero, and everybody works, while in the second equilibrium a majority of voters live off benefits. The first-mentioned equilibrium, however, is transformed into a low-tax rather than a zero-tax equilibrium in (at least) two alternatives cases. One case occurs when voters have altruistic feelings towards individuals who are worse off than themselves. Another case will arise when individuals run the risk of being exposed to idiosyncratic shocks that would exclude them from working life, hence forcing them to live on transfer, for instance due to health problems (Lindbeck, Nyberg, Weibull, 1996, revised 1997).

Some of the implications of the model are illustrated in Figure 1, with the tax rate *t* on the horizontal axis and the transfer *T* on the vertical. One possible relation between *t* and *T* looks like a Laffer curve, the solid curve OACQ in panel *a* of the figure. The shape of the curve reflects both the tax disincentives on work, as in the traditional Laffer curve, and the

declining discomfort of living off benefits when the number of beneficiaries increases, which tends to reduce the tax base.

(Figure 1 about here)

The relation between $t$ and $T$ may have a less orthodox shape, however. Even though there exists, at most, one population share $x$ of transfer recipients for each tax/transfer pair when the budget is balanced, there remains, at least *a priori*, the possibility of more than one "transfer/recipient" pair $(T, x)$ for certain tax rates that balance the budget. This possibility of multiple solutions in terms of $T$ and x, at a given $t$, is a result of the assumed social norm (the "social preferences"). What is required for such multiplicity is that the discomfort of living off transfers rather than work, as expressed by the $v(\cdot)$-function, falls sufficiently fast in some interval of the population share of transfer recipients. As a result, a sizeable population share within this interval shifts from living off work to living off transfers. A balanced budget may then require that the incentives to work be boosted by *both* less generous transfers *and* lower tax rates. The Laffer-like curve will then turn into a "Laffer correspondence" that is non-convex valued over an interval of tax rates. This possibility is illustrated by the "folding curve" ("the wave") in panel *b* of the figure, with two equilibria at tax rate $t_3$ and at tax rate $t_4$, and three equilibria at tax rates in between.

If the unrealistic assumption that voters can accurately predict the number of beneficiaries is replaced by an assumption of bounded rationality, more interesting dynamic

processes may emerge. Unfortunately, assuming bounded rationality in this case makes it necessary to enter the world of heuristic *ad hocery*. As an illustration, let us assume that the tax rate initially happens to be $t_0$ in Figure 1a, and that the corresponding tax/transfer combination is point A (with a related value for *x*). This point depicts a situation where there is a majority of taxpayers. (If there happens to be a majority of beneficiaries, the chosen tax rate cannot be to the left of the point where T is at its maximum.)

Assume further that voters, because of delayed adjustment of behavior, underestimate the long-term rise in the number of individuals who choose to be beneficiaries if *t* is raised for the purpose of increasing transfer payments. More specifically, suppose that a majority of voters *incorrectly* believes that the long-term tax/transfer equilibrium locus, under a balanced budget, is the curve segment ABQ. Thus, voters are assumed to overestimate the long-term tax revenues, and hence the size of the balanced-budget transfer, when tax rates are raised. Voters may underestimate *either* the disincentive effects on work *or* the decline in the discomfort ("stigmatization") of living off benefits when more people do so.

Suppose that the electorate, on the basis of these incorrect assumptions, votes for an increase in the tax rate to $t_1$, believing that the economy *in the long-run* will wind up at the tax/transfer point B, whereas only point C is, in fact, consistent with a balanced budget. Continuing our heuristic reasoning, how might voters react when they subsequently find out that their expectations were mistaken in the sense that *x* became larger than they had expected, and that the expected transfer *T* cannot be financed with a balanced budget? One conceivable response (among several) is that voters conclude that the welfare state has "overshot" and that *t* should therefore be reduced. For simplicity, let us assume that voters decide to return to the initial point A with the tax rate $t_0$. If there is a similar type of inertia in individual adjustment when *t* is reduced as when it was raised earlier, the "retreat path" will be below the solid curve segment AC; it may, for instance, look like the arrowed curve CA. Thus, there may be *temporary* multiple equilibria even if the long-term balanced-budget relation between the tax rate and the transfer payment looks like the solid curve in Figure 1a.

An alternative type of disturbance occurs if the number of beneficiaries rises abruptly in connection with a major unemployment-creating macroeconomic shock that "throws" a great number of individuals onto various safety nets. In the context of our model, this may

be depicted either as a change in the distribution of wages or as a rise in the number of individuals who are not able to work. The discomfort of living off benefits may then be eroded for a considerable fraction of the population -- but, realistically, probably only after a time lag. Later on, voters may also regard this situation as reflecting an "overshooting" of welfare-state spending.

When there are multiple equilibria also in the long run, as depicted in Figure 1b, much more complex paths may arise (Lindbeck, Nyberg and Weibull, 1996). Suppose that the tax rate is initially below $t_3$ and that it is gradually raised above this level. As the gradually rising tax rate enters the interval where the curve folds, between the rates $t_3$ and $t_4$, a multiplicity of balanced-budget transfers will arise. However, expectations formation concerning the population share *x* may exhibit inertia. It is then possible that the policy (t, T) would continue to slide along the upper side of the fold, even though there are, in fact, three equilibria between the tax rates $t_3$ and $t_4$. At the point where the curve turns vertically downward, i.e., at tax rate $t_4$, a further marginal increase in *t* generates a finite downward jump in *T*. The reason is that a large fraction of the population suddenly switches from working to living off transfers, and that a cut in *T* is then necessary to balance the budget. Thus, a continuous rise in *t* may, at some point, result in a discontinuous increase in the number of beneficiaries and necessitate an abrupt reduction in the size of the transfer. This, then, is another example of an "overshooting " of the welfare state. Assuming the same type of inertia in expectations concerning *x* when tax policy is reversed, the "retreat path" would again differ from the "overshooting path". We may subsequently also experience an abrupt (though delayed) fall in the number of transfer recipients at tax rate $t_3$, accompanied by the possibility of raising the transfer *T* again without violating the requirement of a balanced budget.

### *II Norms against underbidders*

Interaction between economic incentives and social norms is important also when trying to explain why unemployed workers, so-called outsiders in the labor market, are not able to get jobs by underbidding existing wages of employed workers, so called insiders. An obvious explanation is that such underbidding is not regarded as a socially acceptable form of behavior. In other words, there may be a social norm against wage underbidding. If so, where did this social norm come from, in whose interest did it emerge and how is it

maintained? One possibility is that the insiders have created it in their own interest. Indeed, insiders have powers both to create and to uphold such a norm against the interest of the outsiders because of firms' costs of replacing insiders by outsiders. In fact, insiders can boost these costs by their own actions. Insiders may, for instance, push up the reservation wage of underbidding outsiders by threatening to harass them if they "break" into firms by offering to work for wages below the going wage for employed workers with the same qualifications. Insiders can also reduce the productivity of underbidding outsiders by threatening to withdraw their cooperation in the production process if the latter try to enter firms by underbidding existing insider wages. Insiders may also use such powers if outsiders try to be *added* to the workforce (rather than to replace insiders) by offering to work at wages lower than those of incumbent employees. As a result of these mechanisms, persistent involuntary unemployment may arise; see Lindbeck and Dennis Snower (1988) for a formalization.

After such threats of non-cooperation and harassment have been made and perhaps executed a number of times, it is not surprising that a social norm against underbidding emerges. One reason why such a norm became rather generally accepted in society at large in the late 19th century is presumably that it contributed to strengthening the bargaining position of workers *vis-à-vis* employers who had the upper hand due to an abundant supply of homogeneous labor willing to work at reservation wages close to starvation levels.

As punishing underbidders is a collective action, labor unions and their leaders may have helped *institutionalize* the norm, hence making the threats more effective. Language may also have facilitated an *internalization* of this norm by framing the ways underbidders are looked upon in society; derogatory terms such as "scabs", expressing ostracism, have not been uncommon. It should also be noted that there is tension between a social norm against wage underbidding and the earlier discussed norm in favor of work; adherence to the former norm may prevent people from living up to the latter.

This theory of the emergence and maintenance of a social norm against wage underbidding, via the "domination" of insiders over outsiders, is not plausible, however, unless the threats by the former are credible. If an underbidder is hired by a firm in spite of such threats, is it really in the interest of the initial insiders, and their unions, to implement the threats? The answer is "yes" under plausible circumstances (Lindbeck and Snower, 1988 and Reply 1990).

(1) Although it may in general be inherently disagreeable to harass other people, this may not be the case for *all* insiders in the special situation where outsiders have actually "broken" into firms by underbidding existing wages. Indeed, some insiders might even feel personal satisfaction from punishing underbidders in this situation, on the ground that the latter are thought to “deserve” such harsh treatment -- in the same way as some victims of crime may get personal satisfaction from knowing that criminals are punished. Hence, for such insiders, the punishment of defectors may have a positive rather than a negative utility payoff.

(2) Moreover, even if punishing a defector would be costly and disagreeable today, there may be long-term gains by discouraging underbidders in the future. Insiders may, therefore, want to invest in reputation. Thus, in a multiperiod setting, insiders may be willing to execute their threats simply because they want to signal their “types” to prospective underbidders in the future.

(3) A social norm against underbidders may also be combined with a supernorm, or metanorm, among insiders. Individual insiders who do not punish outsiders who have disobeyed the norm ought to be punished themselves; those who do not punish those who do not punish underbidders should also be punished, etc. in infinite regression. Here is then a third mechanism that may make threats of non-cooperation and harassment credible.

## *III Saving and consumption norms*

Decisions on saving and consumption provide a third important illustration of relations between economic incentives and social norms in the context of household behavior. As in the case of work, it is reasonable to argue that economic incentives were conducive to household saving before the buildup of the modern welfare state. Not only were capital-income taxes low; a more important point is probably that during periods of economic distress, individuals did not receive (much) income support from the government. It is natural that a social norm in favor of saving would develop under such circumstances. One plausible mechanism was, again, an evolutionary process by which individuals imitated the behavior of those who had achieved economic security via accumulated savings. Moreover, it is often asserted that private wealth, i.e., accumulated savings, generates status; this is also likely to create and maintain a social norm in favor of saving. Before the welfare state, altruistic parents also had economic incentives to instil positive attitudes

towards saving among their offspring, quite simply to avoid having to support them in the future. Parents had also a "pension motive" for encouraging good saving habits, and hence the accumulation of wealth, among their children. Historically, as we know, "civil society", including the church and the school system have often framed both work and saving as virtues, hence promoting both an institutionalization and an internalization of social norms concerning these types of behavior.

The emergence of generous welfare-state arrangements and high taxes on capital incomes after World War II has, however, made individual life-cycle and precautionary saving both less rewarding and less important. Thus, it is reasonable to assume that tension has emerged between economic incentives and inherited social norms also in the case of saving. It is, therefore, tempting to speculate that previously established social norms in favor of saving help explain why household saving fell only gradually after the buildup of elaborate welfare-state arrangements. An interesting question then is whether the current crisis of the welfare state in some countries, with an apparent loss of confidence in various welfare-state arrangements among citizens, will not only boost private saving but also again strengthen the social norm in favor of saving.

A complication regarding the notion of a social norm in favor of saving is that some reasonable consumption theories instead assume that there are social preferences in favor of consumption, in the sense that the desire to consume is boosted by "demonstration effects" of consumption by others; Duesenberry's consumption theory is the most obvious example. The underlying psychological mechanism is usually assumed to be that a *relatively* high level of consumption is either a basis for social status (a signalling interpretation) or a way of achieving self-respect; both tend to make other peoples' consumption a social norm.

Theories emphasizing the importance of the relative positions of *either* saving *or* consumption are each quite consistent with celebrated sociological and psychological theories of human behavior, such as "reference group theory", "dissonance theory", theories of "anchoring effects" and "adaptation level theory"; for surveys see Arie Kapteyn and Tom Wansbeek (1982). There is some tension, however, inherent in the idea that there are social norms which boost both relative saving and relative consumption. There is even a contradiction between the two norms if income is given. One possibility of mitigating this tension is to argue that the drive for both high relative consumption and large relative accumulated savings encourages individuals to raise their income by hard work and good

management of their wealth. This would, in fact, mean that a social norm in favor of relative income supports the earlier discussed norm in favor of work. Another (complementary) reconciliation of the two hypotheses would be that the social influence on consumption refers to specific goods, and hence to the *composition* of consumption, rather than to total consumption of the individual or household. Notions of "conspicuous consumption" and "bandwagon effects" are illustrations. Indeed, this is the way Duesenberry's hypothesis has subsequently been applied both in theoretical research, where consumption of others enter the individual's utility function (Robert Pollak, 1976) and in empirical studies on disaggregate expenditure functions (Rob Alessie and Kapteyn, 1991).

Empirical research in social psychology also suggests that positive attitudes towards saving exist alongside of serious concern about the sacrifices associated with abstaining from consumption (Karl-Erik Wärneryd, 1996). The statistical correlation between attitudes towards saving and actual saving behavior has also turned out to be quite weak. Maybe the social norm in favor of saving refers to a virtue that many people are not able to live up to -- an example of so-called "cognitive dissonance", asserted to arise when the individual suffers mentally from conflicting ambitions (Leon Festinger, 1957).

## *IV In Conclusion*

The mechanisms by which social norms emerge, are learned and maintained turn out to be rather similar in the three examples of household behavior discussed in this paper, though the relative importance of various aspects differ, particularly regarding rational imitation of successful economic behavior of others, group dynamics, economic domination and explicit punishment of individuals who threaten the interests of norm senders. Moreover, my discussion of the last two examples -- norms against wage underbidding and norms concerning saving and consumption -- is implicitly based on the same type of utility analysis as in the first example (work norms). While income (or consumption) generate utility, there is assumed to be disutility of deviating from either the actual behavior of others or the behavior expected, or even required, by others. These points hopefully illustrate the importance and usefulness of analyzing interactions between economic incentives and social norms in household behavior.

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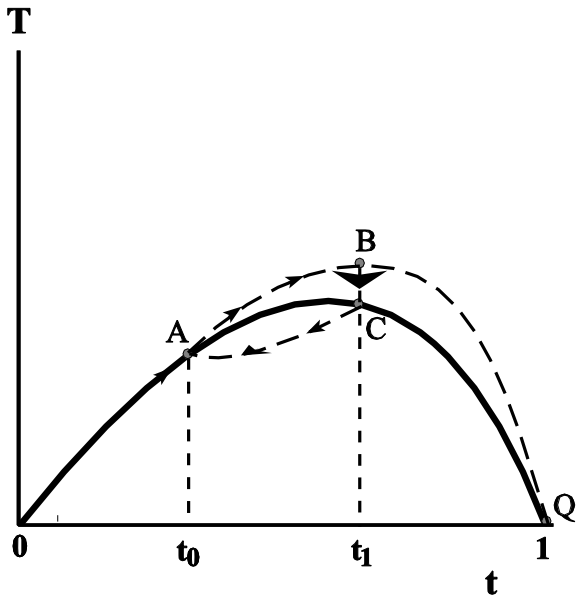


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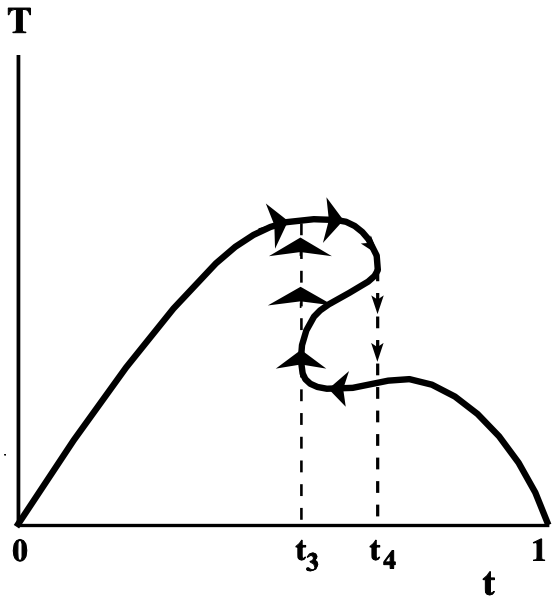


b.

**Figure 1**

Overshooting and retreat of the "transfer state".